Comment Submission 10

In the current issue of the Journal of the American Medical Association is an article about a 20-year study correlating "normal" air pollution with adverse health affects. "Normal" air pollution increases the incidence of heart and lung disease by 13 to 20%. 10-1

The proposed project is upwind of the Walla Walla Valley. We live in a nonattainment area for particulates, which suggests that our air pollution is already worse than "normal". Alone the emissions from the proposed power plant may not be threatening, but combined with the emissions from the other fossil fuel plants operating, under construction, and proposed for upwind of our basin, we should be concerned. The DEIS seems to fairly address the problems. 10-2

First, "the plant would release emissions of PM10 in a PM10 nonattainment area. To offset the production of 303 tons of particulates from the plant, the applicant proposes to purchase or lease up to 1,300 acres of active farmland and retire it from agricultural use." With particulates from all the other gas-fired power plants and other industrial facilities, there could be "significant unavoidable adverse impacts". 10-3

Second, the plant will emit toxic air pollutants in excess of Washington's "small quantity emission rates": 1,3-Butadiene; Acetaldehyde; Benzene; Formaldehyde; Benzo(a)pyrene; and Propylene Oxide. The emissions of these carcinogens are reported to be in concentrations "less than acceptable source impact levels". The specific threshold concentration of carcinogens at which health hazards begin is unknown. 10-4

A third potential problem is that this plant will emit approximately 6.9 million gallons of water vapor per day to the atmosphere. The DEIS addresses steam plume visibility, summer fogging, icing and other factors. However, it does not adequately address a common situation in the Pasco Basin and Walla Walla Valley: winter fog. When we have high relative humidity in the winter, will the turbines' emissions increase the occurrence of fog, which could cause more flight cancellations and highway accidents? Worse yet, when our valley has a temperature inversion, could the pollutants make our smog even more dangerous to our health? 10-5

The fourth problem is global, not local: greenhouse gases. The total annual emissions of carbon dioxide, nitrous oxide, and other greenhouse gases resulting from the combustion of natural gas, plus fugitive leaks of natural gas (mostly methane) from the pipeline, "would be 4.8% of the greenhouse gas emitted from all sources in Washington State and 9.6% of the amount anticipated to be issued from all proposed future power plants in the Northwest." Scientists agree that burning fossil fuels increases temperature, storminess, and sea level. Insurance companies are worried. 10-6

Is it wise to build new fossil-fuel power plants anywhere? Should they be upwind of a valley subject to fog and temperature inversions? Do eastern Washington and Oregon need the power? Are there any advantages to Walla Walla County other than tax revenue? Is the extra money worth the extra emissions? What about conservation and renewable energy? 10-7 10-8 10-9 10-10 10-11

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Responses to Comment Submission 10,
Letter from Robert J. Carson, Whitman College, Walla Walla, WA

10-1. Section 3.2 of the Draft EIS compared modeled worst-case air pollutant concentrations to EPA's national ambient air quality standards. These are health-based standards set by EPA to provide an adequate margin of safety to protect human health and welfare.

10-2. As described in Section 3.2 of the EIS, the applicant is required to offset 100% of the project's PM10 emissions (the pollutant for which the Wallula area is in nonattainment). The applicant has offered to offset 110% of the project's PM 10 emissions. Using meteorological data from Wallula, the project's modeled air quality impacts for other pollutants are less than EPA's Significant Impact Levels. Therefore, it is unlikely the power plant's emissions (when combined with emissions from other local sources) would significantly increase air pollutant concentrations.

10-3. Please see response to comment 10-2.

10-4. The "acceptable source impact level" air toxics concentration limits were established by the Washington Department of Ecology based on carcinogenic and non-carcinogenic risk factors to be protective of human health. The worst-case air toxics impacts modeled for the power plant correspond to lifetime cancer risks of less than one per million and were assessed to be below the acceptable source impact levels.

10-5. As described in Section 3.2 of the EIS, water vapor emissions from the power plant exhaust stacks and cooling towers are unlikely to significantly impact regional humidity. The water emissions from the plant would be a small fraction of the naturally occurring water vapor that blows through the area, so it is unlikely the plant would cause regional ice fog.

10-6. Section 3.17 has been updated to describe the applicant's proposed greenhouse gas mitigation. Please see Chapter 3 of this Final EIS for updated text.

10-7. Thank you for your comment.

10-8. Please see response to comment 10-5.

10-9. In addition to increased tax revenue, project benefits include, but are not limited to, (1) additional job opportunities for local residents (especially during construction), (2) increased revenue for local businesses that supply materials and services necessary for construction and operation, and (3) increased revenues for commercial businesses that would support a large construction workforce (such as hotels and restaurants). Benefits would be offset if tourists were forced to seek lodging elsewhere due to construction worker use of available rooms, but this is unlikely considering the considerable lodging available in the Tri-Cities to the north.

10-10. Thank you for your comment.

10-11. Bonneville and other utility companies are pursuing conservation and renewable energy to help meet future energy needs. Bonneville has committed to purchase 500 to 1,000 megawatts of wind generation and 60 megawatts of other renewable energy generation. Bonneville also contributes to conservation efforts such as the Northwest Energy Efficiency Business Listing, fuel cell test and development, low-income weatherization, promotion of efficient products through the Northwest Energy Efficiency Alliance and Energy Star, and support to specific federal and public utility projects.

Section 2.3.1 of the Draft EIS described how construction and operation of combustion turbine generators were analyzed along with other strategies for meeting energy demand in Bonneville's Business Plan EIS. This project-specific EIS for the Wallula Power Project is tiered to the programmatic Business Plan EIS and incorporates the analysis of different combinations of strategies.